

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2000332553 A**

(43) Date of publication of application: **30.11.00**

(51) Int. Cl.

H03G 3/02
H03F 3/217
H03M 7/32

(21) Application number: **11141908**

(22) Date of filing: 21.05.99

(71) Applicant: **SHARP CORP**

(72) Inventor: OKUYA HIROMASA
MASUDA KIYOSHI

(54) ONE-BIT DIGITAL AMPLIFYING DEVICE

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a 1-bit digital amplifying device which can adjust an amplification output by increasing or decreasing an amplitude level by simple constitution for an input 1-bit digital signal even when an applied voltage value for pulse amplification is constant.

SOLUTION: This 1-bit digital amplifying device generates a 1-bit quantization output signal S3 by imposing digital sigma modulation by passing an input signal through a digital sigma modulating circuit composed of a differentiator 2, a digital sigma modulation part 3, a pulse amplifier 4, and a feedback circuit FC and imposes pulse amplification on the quantized output signal S3. A 1-bit digital signal S0 is inputted as the input signal. An amplitude level variation part 12 which varies the amplitude level of the 1-bit digital signal S0 is provided before the pulse amplification.

COPYRIGHT: (C)2000,JPO

